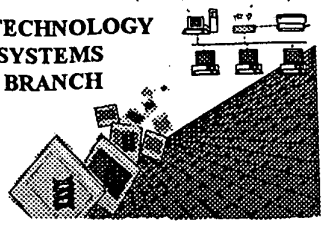
6590
1015

BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/904,923A
Source: OIPE
Date Processed by STIC: 11/13/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.
PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)
PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 3.1 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**>, **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. **Hand Carry directly to:**
   U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
   Or
   U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. **Federal Express, United Parcel Service, or other delivery service to:** U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

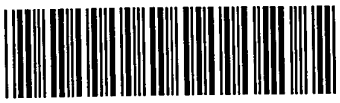
Revised 01/29/2002

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 09/904,923A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 ✓	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2	Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3	Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4	Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5	Variable Length	Sequence(s)____contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7	Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8	Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
10	Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11	Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13	Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.



OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/904,923A

DATE: 11/13/2002
TIME: 13:53:10

Input Set : A:\#153407 v1 - Sequence listing Novartis (2001).txt
Output Set: N:\CRF4\11132002\I904923A.raw

```
     4 <110> APPLICANT: Novartis AG
     6 <120> TITLE OF INVENTION: Modified viral surface proteins for binding to extracellula
     7       r matrix components
     9 <130> FILE REFERENCE: 4-30246a/GTI
    11 <140> CURRENT APPLICATION NUMBER: US 09/904,923A
C--> 12 <141> CURRENT FILING DATE: 2002-10-02
    15 <160> NUMBER OF SEQ ID NOS: 3
    17 <170> SOFTWARE: Patentln version 3.1
```

Does Not Comply
Corrected Diskette Needed

pp 1-2

ERRORED SEQUENCES

```
W--> 18 <210> SEQ ID NO: 1
     19 <211> LENGTH: 229
     20 <212> TYPE: PRT
     21 <213> ORGANISM: Moloney murine leukemia virus
     23 <400> SEQUENCE: 1
     25 Ala Ser Pro Gly Ser Ser Pro His Gln Val Tyr Asn Ile Thr Trp Glu
     26 1               5                  10                  15
     29 Val Thr Asn Gly Asp Arg Glu Thr Val Trp Ala Thr Ser Gly Asn His
E--> 30             20                  25                  30
     33 Pro Leu Trp Thr Trp Trp Pro Asp Leu Thr Pro Asp Leu Cys Met Leu
E--> 34         35                  40                  45
     37 Ala His His Gly Pro Ser Tyr Trp Gly Leu Gly Tyr Gln Ser Pro Phe
     38     50                  55                  60
     41 Ser Ser Pro Pro Gly Pro Pro Cys Cys Ser Gly Gly Ser Ser Pro Gly
E--> 42 65                  70                  75                  80
     46 Cys Ser Arg Asp Cys Glu Glu Pro Leu Thr Ser Leu Thr Pro Arg Cys
     47                 85                  90                  95
     50 Asn Thr Ala Trp Asn Arg Leu Lys Leu Asp Gln Thr Thr His Lys Ser
     51             100                 105                 110
     54 Asn Glu Gly Phe Tyr Val Cys Pro Gly Pro His Arg Pro Arg Glu Ser
     55         115                 120                 125
     57 Lys Ser Cys Gly Gly Pro Asp Ser Phe Tyr Cys Ala Tyr Trp Gly Cys
     58     130                 135                 140
     60 Glu Thr Thr Gly Arg Ala Tyr Trp Lys Pro Ser Ser Ser Trp Asp Phe
     61 145                 150                 155                 160
     63 Ile Thr Val Asn Asn Asn Leu Thr Ser Asp Gln Ala Val Gln Val Cys
     64                 165                 170                 175
     66 Lys Asp Asn Lys Trp Cys Asn Pro Leu Val Ile Arg Phe Thr Asp Ala
     67             180                 185                 190
     69 Gly Arg Arg Val Thr Ser Trp Thr Thr Gly His Tyr Trp Gly Leu Arg
     70         195                 200                 205
```

30 ← insert number

45 ←

80 ←

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/904,923A

DATE: 11/13/2002
TIME: 13:53:10

Input Set : A:\#153407 v1 - Sequence listing Novartis (2001).txt
Output Set: N:\CRF4\11132002\I904923A.raw

72 Leu Tyr Val Ser Gly Gln Asp Pro Gly leu Thr Phe Gly Ile Arg Leu
73 210 215 220
75 Arg Tyr Gln Asn Leu
76 225
79 <210> SEQ ID NO: 2
80 <211> LENGTH: 687
81 <212> TYPE: DNA
84 <213> ORGANISM: Moloney murine leukemia virus
87 <400> SEQUENCE: 2
E--> 88 gcttcgcccg gctccagtcc tcatcaagtc tataatatca cctgggaggt aaccaatgga
89 60
E--> 91 gatcgggaga cggtatgggc aacttctggc aaccaccctc tgtggacctg gtggcctgac
92 120
E--> 94 cttaccccag atttatgtat gttagcccac catggaccat cttattgggg gctagaatat
95 180
E--> 97 caatcccctt tttcttctcc cccggggccc ccttgttgct caggggggcag cagcccaggc
98 240
E--> 100 tgttccagag actgcgaaga acctttaacc tccctcaccc ctcggtgcaa cactgcctgg
101 300
E--> 103 aacagactca agctagacca gacaactcat aaatcaaatg agggatttta tgtttgcccc
104 360
E--> 106 gggccccacc gcccccgaga atccaagtca tgtgggggtc cagactcctt ctactgtgcc
107 420
E--> 109 tattggggct gtgagacaac cggtagagct tactggaagc cctcctcatc atgggatttc
110 480
E--> 113 atcacagtaa acaacaatct cacctctgac caggctgtcc aggtatgcaa agataataag
114 540
E--> 116 tggtgcaacc ccttagttat tcggtttaca gacgccggga gacgggttac ttcctggacc
117 600
E--> 119 acaggacatt actggggctt acgtttgtat gtctccggac aagatccagg gcttacattt
120 660
E--> 123 gggatccgac tcagatacca aaatcta
124 687
127 <210> SEQ ID NO: 3
128 <211> LENGTH: 10
129 <212> TYPE: PRT
132 <213> ORGANISM: Artificial Sequence
134 <220> FEATURE:
135 <223> OTHER INFORMATION: collagen-binding domain of von Willebrand Factor
137 <220> FEATURE:
138 <221> NAME/KEY: BINDING
139 <222> LOCATION: (1) (10)
140 <223> OTHER INFORMATION:
W-> 143 <400> 3
145 Trp Arg Glu Pro Ser Phe Met Ala Leu Ser
146 1 5 10
176 #153407v1
E--> 177 4-30246A DG.ST25.txt
E--> 179 Page 3

60
120
format error (see item 1 on Error Summary Sheet)
delete

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/904,923A

DATE: 11/13/2002
TIME: 13:53:11

Input Set : A:\#153407 v1 - Sequence listing Novartis (2001).txt
Output Set: N:\CRF4\11132002\I904923A.raw

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:18 M:283 W: Missing Blank Line separator, <210> field identifier
L:30 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:1
M:332 Repeated in SeqNo=1
L:88 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:60 SEQ:2
M:254 Repeated in SeqNo=2
L:143 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:140
L:177 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:177 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
L:179 M:252 E: No. of Seq. differs, <211> LENGTH:Input:10 Found:11 SEQ:3